

Appl. No. 10/695,813
Amendment dated: October 19, 2006
Reply to OA of: April 19, 2006

REMARKS

Reconsideration of the present patent application is respectfully requested in view of the following remarks.

I. Response to Objection on the Drawings Under 37 CFR 1.83(a)

This rejection was on the basis that the feature recited in claim 8, "wherein positive and negative polarities of the characteristic curve," was not shown in the drawings. In reply, the applicant has canceled claim 8.

II. Response to Rejections Under 35 U.S.C. § 112

Examiner indicates that claim 3 of the present patent application is rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. In addition, the Examiner also indicates that claim 8 of the present patent application is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In reply to the first paragraph rejection, the applicant has amended claim 3 to clarify that the coded data is first received and sampled by sample/latch units and then transmitted to the digital-to-analog converters, as illustrated in Fig. 3 and described in lines 4-13 on page 4 of the original specification, and consistent with the Examiner's interpretation.

The second paragraph rejection has been rendered moot by the cancellation of claim 8.

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III. Response to Rejections Under 35 U.S.C. § 102

The Examiner indicates that claims 1, 2, 4 and 6-8 of the present patent application are rejected under 35 U.S.C. § 102 as being anticipated by the US Patent No. 6,462,735 (Naito et al.).

In response to this rejection, the applicant has first amended claim 1 of the present application to recite the characteristics of the "plurality of characteristic curves" into claim 1. The amended claim 1 is shown in the aforesaid listings of claims. In particular, claim 1 now recites that the "coding unit" of the claimed driving circuit now generates a plurality of "coded data" according to a plurality of characteristic curves at the same time, wherein the plurality of characteristic curves are Gamma curves for three chromatic lights (red, green, and blue), respectively. Instead of processing red, green, and blue together in the manner of the claimed invention, the Naito patent processes the respective colors separately.

Unlike the claimed invention, the "ASIC 210" of the driving circuit of the display device of the cited Naito patent can only process a digital picture signal of one of the three chromatic lights output from the "A/D converter 100" at a single processing time of the ASIC. Then, after the picture signal is processed, for example by performing the "gamma correction process", the "phase expansion process", and the "digital polarity inversion process" on the picture signal by the ASIC, the picture signal is sent to the "D/A conversion block 260" for digital-to-analog conversion.

As described in column 8, lines 43 to 60 of the specification of the Naito patent, the picture signal of each chromatic light, *i.e.*, *one* of the three chromatic lights comprising red (R), green (G), and blue (B), is first analog-to-digital converted by the A/D converter 100. Only then is the digitized picture signal of one of the three

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chromatic lights gamma-corrected by the ASIC 211 and thereafter digital-to-analog converted by the "D/A converter 260". Therefore, the picture signals of all three chromatic lights disclosed in the Naito are separately processed. In other words, the picture signals corresponding to the three chromatic lights of Naito may be processed with three different sets of "signal processing circuit 200" at the same time, or be processed with the same set of "signal processing circuit 200" using a time-domain multiplex method, but the lights cannot be processed with one circuit at one time.

In summary, after the amendment to claim 1, the **"coding unit"** of the driving circuit of claim 1 of the present patent application can process **all three characteristic curves** (Gamma curves) respectively for three chromatic lights at the same time. There is no need in the claimed processing circuit to provide three sets of "signal processing circuit 200," nor any need to employ a time-domain multiplexing method to share the processing time of the "signal processing circuit 200." As a result, in view of the foregoing amendment to claim 1, the driving circuit of claim 1 of the present patent application is different from the driving circuit including the "signal processing circuit 200", the "amplifying block 300" and the "data drive circuit 430" of the cited Naito patent, and withdrawal of the rejection of claim 1 based on the Naito patent is respectfully requested. The other claims are directly or indirectly dependent on claim 1, and thus are distinguished from the prior art by the same reason.

IV. Response to Rejections Under 35 U.S.C. § 103

Examiner indicates that claims 3 and 5 of the present patent application are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Pat. No. 6,462,735 (Naito et al.), in view of US Pat. No. 4,183,046 (Dalke et al.).

This rejection is respectfully traversed on the grounds that the Dalke patent, like

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the Naito patent, fails to disclose or suggest a “coding unit” for a flat panel display driving circuit that generates a plurality of “coded data” according to a plurality of characteristic curves at the same time, wherein the plurality of characteristic curves are Gamma curves for three chromatic lights (red, green, and blue), respectively, as now recited in claim 1.

Although the Dalke patent does disclose that “coded data are inputted through sample/latch”, the “sample/latch process” of Dalke is executed on a traditional color CRT television, and not on a flat panel display. Flat panel displays require an entirely different sample/latch arrangement than CRTs. Therefore, it would not have been obvious to include the circuit of Dalke in the flat panel display driver of Naito. To the contrary, the “technology gap” between a traditional color CRT television and a flat panel display is so huge that persons skilled in the art of the traditional color CRT television are a totally different group of technicians than those skilled in the art of the flat panel display. One skilled in the art of the flat panel display could not have anticipated, or found obvious, the “sample/latch process” of claims 3 and 5 of the present patent application based on the “sample/latch process” executed in the traditional color CRT television of the Dalke patent, and withdrawal of the rejection of claims 3 and 5 based on the Naito and Dalke patents is respectfully requested.

CONCLUSION

In view of the foregoing remarks, reconsideration and allowance of the application are now believed to be in order, and such action is hereby solicited. If any points remain in issue that the Examiner feels may be best resolved through a

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personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

BACON & THOMAS, PLLC

A handwritten signature in black ink, appearing to read 'B. Urcia', with a long horizontal flourish extending to the right.

By: BENJAMIN E. URCIA
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Date: October 19, 2006

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